The Said and the Unsaid

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I am delighted to be back in Columbus for semantics in the spring. Twenty-three years ago, when I was here on a similar occasion, on the very first evening of my life spent in the Midwest, I was stopped, frisked, and interrogated by an officer of the law for suspicion of being outside in downtown Columbus and possession of long hair. When I explained I was in town for the First Annual Spring Semantics Festival, the policeman seemed unimpressed. Columbus has clearly matured since 1969, and so have studies in linguistic semantics. I'm not so sure about me.

I have come to live with the fact that the exciting new (or at least only slightly used) way of looking at scalar predicates I developed in my thesis (Horn 1972) is now ritually trotted out, en route to being dismissed, as the 'classical', 'orthodox', 'traditional', or 'standard' neo-Gricean line, a fact which—combined with the fact that it's also taken as embodying the 'radical pragmatics' tradition—leaves me feeling like one more old radical, inexplicably still manning the crumbling barricades of a forgotten campaign, quaint and probably harmless if not entirely irrelevant, sort of like Allen Ginsberg without the beard, or Abbie Hoffman, only a little less dead. So what better way to celebrate the revival of our semantic rites of spring that to survey the utterance interpretation scene by hauling out the tired old bones of the traditional radical line on what is said and what is unsaid?

The new traditionalism

One advantage accruing to the sponsor of a Brand X theory is partial immunity from having to dwell on the specs of the product. But to situate us in the appropriate domain, I'll begin by recalling that on my analysis (Horn 1972, 1973; cf. Gazdar 1979, Hirschberg 1985, Horn 1989: Chapter 4, Wainer & Maida 1990, and Iwańska 1992 on formalization), what is SAID in the use of a weak scalar value like those in boldface in the sentences of (1) is the lower bound (...at least n...), with the upper bound (...at most n...) IMPLICATED as a cancellable inference generated by the maxim of quantity (more on which below).

(1) Scalar predication	1-SIDED READING →	2-SIDED READING
a. Max has **3** children.	'...at least 3...'	'...exactly 3...'
b. You ate **some** of the cookies.	'...some if not all...'	'...some but not all...'
c. It's **possible** she'll win.	'...at least ◊...'	'...◊ but not certain...'
d. Maggie is patriotic **or** quixotic.	'...and perhaps both'	'...but not both'
e. It's **warm** out.	'...at least warm...'	'...but not hot...'

Thus there is no semantic ambiguity on the lexical or sentential level, contrary to e.g. Aristotle's view (cf. also Burton-Roberts 1984) that *possible* is homonymous between the lower-bounded one-sided reading ('at least possible', 'not impossible') and the lower- and upper-bounded two-sided reading ('at least and at most possible', 'neither impossible nor necessary'), and to analogous claims on *some* by Sir William Hamilton of Edinburgh, on the cardinals by Steven Smith, and so on. These were, in short, no straw men I sought to slay with Grice's Modified Occam's Razor in one hand ('Senses are not to be multiplied beyond necessity') and the pragmatic principle of strength or quantity in the other. This latter weapon, essential to any monoguist treatment of scalar values, has been retooled over the years—in a recent paper (Horn 1990a), I explored its roots, touching on the version in (2), among others.

(2) Quantity maxim (Strength rule, etc.)

Strawson's GENERAL RULE OF LINGUISTIC CONDUCT (1952: 178-9), but with acknowledgments to 'Mr H. P. Grice':

> One should not make the (logically) lesser, when one could truthfully (and with greater or equal clarity) make the greater claim.

Grice's 'first shot' (1961: 132):

> One should not make a weaker statement rather than a stronger one unless there is a good reason for so doing.

Grice's [FIRST] MAXIM OF QUANTITY (1967/1975: 45):

> Make your contribution as informative as is required (for the current purposes of the talk-exchange).

Fogelin's RULE OF STRENGTH (1967: 20):

> Make the strongest possible claim that you can legitimately defend!

O'Hair's version of the strength rule (1969: 45)

> Unless there are outweighing good reasons to the contrary, one should not make a weaker statement rather than a stronger one if the audience is interested in the extra information that would be conveyed by the latter.

Harnish's MAXIM OF QUANTITY-QUALITY (1976: 362):

> Make the strongest relevant claim justifiable by your evidence.

Clearly, an idea whose time had come. For Grice, the methods of radical pragmatics were put to the service of defending a conservative semantics, one with truth-conditional operators analyzed very much in the classical Russellian way, with the gap between what that logic gives us and what we seem to need bridged by the assumption that speaker and hearer are in this business together, a business conducted under the banner of the Cooperative Principle and the attendant maxims. Quantity-based scalar implicature—my inviting you to infer from my use of *some*... that for all I know *not all*...—is driven in particular by your knowing (and my knowing your knowing) that I expressed a weaker proposition when I could have, but chose not to, use a no more formally marked utterance that would have expressed a stronger proposition, one that would have unilaterally

entailed the one I did express. The pragmatic, context-dependent nature of this inference is standardly supported by invoking contexts in which it disappears. Some recent cancellation instances appear in (3):

(3) Now you see it, now you don't

a. If you want to compare two languages, it helps to know one of them.
(attributed to L. Bloomfield; cf. Hockett 1978)

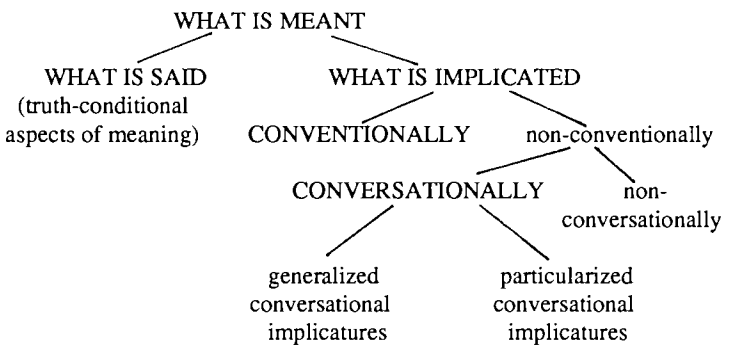
b. —How many months have 28 days?
—All of them.
(Cited in G. G. Pocheptsov, *Language and Humour* , Kiev 1974)

c. 'This changes everything', a startled Mr. Dumas told the Spanish envoy when he showed him the photocopies of the Araquistain documents. 'You of course have the originals?' the lawyer asked casually. 'Not all of them', replied Mr. Fernández Quintanilla, not lying but not telling the truth, either.
(N.Y. Times article, 1991, recounting 'an elaborate bluff' successfully run by diplomat F.Q. to convince Picasso's lawyer that he (F.Q.) possessed the crucial documents to prove Spain was legal owner of Guernica mural; in fact, however, F.Q. had NONE of the originals, only copies)

d. Like the author, I have lost 'few friends' to AIDS. (In fact, I have lost none.) Yet one need not have suffered any personal losses from AIDS to recognize... (letter to the editor, N.Y. Times 10/19/90, A34)

The cancellability of the upper bound of scalar predications, along with the calculability of the inference by the Quantity or Strength maxim, testifies to its status as a conversational implicatum, rather than either as part of truth-conditional content (what is said) or as a non-truth-conditional component of conventional meaning. Given the Gricean field of play laid out as in (4), the relevant distinctions within the traditional catechism are reproduced in (5):

(4)



(5)	CONVENTIONAL IMPLICATA	CONVERSATIONAL IMPLICATA
a.	Make no contribution to truth conditions, but constrain appropriateness of expressions with which they are associated.	
b.	Unpredictable, arbitrary part of meaning; must be learned ad hoc.	Natural concomitant of what is said or how it is said; NON-CONVENTIONAL by definition.
c.	NON-CANCELABLE; apply in all contexts of utterance.	CANCELABLE, explicitly (by ling. context) or implicitly (by extraling. context)
d.	DETACHABLE: two synonyms may have different conventional implicata	NON-DETACHABLE if arising via content maxims; detachable if arising via Maxim of Manner.
e.	NOT CALCULABLE through any procedure; must be stipulated.	CALCULABLE through Cooperative Principle and the Maxims of Conversation.

But if the upper bound is implicated and not said, how is it that it may come under the scope of logical operators, and in particular of negation? While negating the sentences in (1) usually denies their lower bound, we must also account for the data in (6), where it is the upper bound that comes under attack.

(6)a. This Birthday Card is NOT from one of your admirers!

It's from TWO of your admirers. Happy Birthday From Both of Us!
(outer and inner text respectively of Hallmark card)

b. SOME men aren't chauvinists—ALL men are chauvinists.

c. Chris didn't manage to solve SOME of the problems—he managed to solve ALL of them.

Of course, here the new traditionalist will seek to assimilate those ill-behaved cases to the broader phenomena of METALINGUISTIC NEGATION[1], a device for objecting to a previous utterance of any grounds whatever, including its phonetic or morphological form as in (7), its register or style as in (8), or its focus, point of view, or connotative meaning as in (9):

(7)a. (—So, you [mɪ́ɾənɪ̌d] to solve the problem.)
—No, I didn't [mɪ́ɾənɪ̌] to solve the problem—I [mǽnɪ̌d] to solve the problem.

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[1]Cf. Horn 1985, Horn 1989: Chapter 6; for critical commentary on 'metalinguistic negation', see now Carston 1985a, Kempson 1986, Burton-Roberts 1989, Horn 1990b, McCawley 1990, Seuren 1990, Sweetser 1990, Foolen 1991, van der Sandt 1991, Wiche 1991, and Iwanska 1992.

b. He didn't call the [POlis], he called the [poLIS]. (*gratia* Andy Rogers)
c. I didn't trap two monGEESE—I trapped two monGOOSes.
d. (—Esker too ah cooPAY luh veeAND?)
—Non, je n'ai pas 'cooPAY luh veeAND': j'ai coupé la viande.

(8) a. Now, Cindy, dear, Grandma would like you to remember that you're a young lady: Phydeaux didn't 'shit the rug', he soiled the carpet.
b. Grandpa isn't feeling lousy, Johnny, he's just a tad indisposed.
c. We didn't make love—we fucked.
d. It's not stewed bunny, honey, it's civet de lapin.

(9) a. Ben Ward is not a black Police Commissioner but a Police Commissioner who is black. (N. Y. Times editorial, 1/8/83)
b. I'm not his daughter—he's my father.
c. I'm not HIS brother—HE's MY brother.
d. She is not Lizzy, if you please—she's Her Imperial Majesty.
e. For a pessimist like you, the glass isn't half full—it's half empty.
f. I'm not a TrotskyITE, I'm a TrotskyIST.
g. They're not the best at what they do—they're the only ones who do what they do. (music critic on The Grateful Dead)
h. Winning isn't everything—it's the only thing.
(attributed to football coach Vince Lombardi)
i. They weren't people, Sir, they were the enemy.
(Lt. William Calley, on My Lai massacre victims)

To these examples, discussed in more detail in my earlier work, we can add the entries in (10):

(10)a. I'm not a Jew...I'm Jew-*ish*. I don't go the whole hog.
(British neurologist/director/comedian Jonathan Miller, in *New Yorker* interview)
b. I am not 'nonwhite'; nor are my friends of Bahamian, Cape Verdian, Colombian, Cuban, Dominican, Jamaican, Japanese, Korean, Panamanian, Puerto Rican or Trinidadian descent. I, a woman of African descent, an African-American if you will, would never be so presumptuous as to characterize 'whites' as 'non-black'...Identity is not 'non' anything.
(Aleah Bacquie, letter to editor of N. Y. Times, 3/14/90)
c. 'You mean he was responsible for the 1984 riots?' the Newstrack interviewer said, referring to Mr. Gandhi.
Mr. Shekhar replied: 'I don't "mean" it. I know it.'
(from N. Y. Times article, 10/22/89, 'Indian News Program Struggles With Censors')
d. 'No, he was *not* a bisexual!' Mr. Georgie affixed an eyelash and approved of it in the lighted mirror. 'H. R. Loomis was *omni* sexual.'
(Fennelly 1985: 83)

Notice in particular that implicata based on Quantity and other maxims may constitute the focus of negation, as in (10c,d) or the examples of (11):

(11)a. A: What brand of motor oil do you use?
B [starting car engine]: Motor oil is motor oil.
[Smoke belches out of B's exhaust.]
Voice-over: Motor oil is definitely NOT motor oil.
(Quantity-based implicatum associated with tautologies; cf. Ward & Hirschberg 1991)

b. Miss X didn't 'produce a series of sounds that corresponded closely with the score of "Home Sweet Home"', dammit, she SANG 'Home Sweet Home', and a lovely rendition it was too!
(Manner-based implicatum, 'Be brief' submaxim; cf. Grice 1975: 55-56)

c. Mozart's sonatas weren't for violin and piano, they were for piano and violin. (Manner-based implicatum, 'Be orderly' submaxim)

The general thesis motivated by these examples—supported by a variety of arguments for why the marked instances of negation illustrated in the sentences of (6)-(11) should receive a unified treatment[2]—can be given as follows (Horn 1989: 377):

> Apparent sentence negation represents either a descriptive truth-functional operator, taking a proposition Φ into a proposition not-Φ (or a predicate *P* into a predicate not-*P*), or a metalinguistic operator which can be glossed 'I object to U', where U is crucially a linguistic utterance rather than an abstract proposition.

This last point, the non-propositional nature of marked negation, is emphasized by an instance of negation brought to my attention by Barbara Abbott:

(12) [Piano student plays passage in manner μ.]
Teacher: It's not [plays passage in manner μ]
—it's [plays same passage in manner μ'].

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[2]For Karttunen & Peters (1979), a 'contradiction negation' used to reject the conventional implicata (or lexical presuppositions) induced by a given lexical item like the italicized verbs in the sentences of (i) and (ii)

(i) I didn't *manage* to pass the test: I was given the answers.

(ii) I didn't *happen* to be at this intersection as you were passing by: I was expecting you.

is accounted for by assigning this 'plug' negation wide scope with respect to a conjunction of the entailment and conventional implicatum associated with the unnegated sentences. But, as noted in Horn 1985, such an approach does not generalize to the morphosyntactically and intonationally similar negations of the type in (6)-(12) here, where conversational implicata and morphological, phonetic, stylistic, and musical representations would have to be propositionalized to bring them within the scope of a logical negation operator.

The distinction between unmarked and marked functions of negation in scalar contexts was explicitly recognized by Jespersen:

> With quantitative terms not nearly always means 'less than'...but exceptionally these combinations [not once, not much, not three, not half full,...] may convey another meaning; this is the case if we stress the word following not and give it the peculiar intonation indicative of contradiction, and especially, if the negation is followed by a more exact indication: not LUKEWARM, but really hot; not ONCE but two or three times, etc. (Jespersen 1933: 300-1)

Thus, given our examples in (1), we obtain the descriptive (= 'less than') negations of (13) and the metalinguistic negations of (14):

(13)a. Max doesn't have **3** children. (= he has fewer than 3)
b. You didn't eat **any** of the cookies. (note the *some/any* suppletion)
c. It isn't **possible** she'll win. (= it's impossible that she'll win)
d. Maggie is patriotic **or** quixotic. (= she's neither patriotic nor quixotic)
e. It isn't **warm** out. (= it's less than warm)

(14)a. He doesn't have **3** children, he has **4**.
b. You didn't eat **some** of the cookies, you ate **all** of them.
c. It isn't **possible** she'll win, it's downright **certain** she will.
d. Maggie isn't patriotic **or** quixotic, she's both patriotic **and** quixotic.
e. It's not **warm** out, it's downright **hot**.

Note the application of Jespersen's features—the focal stress, the intonation indicative of contradiction, and the rectification—diagnostics that I have argued characterize metalinguistic negation, along with restrictions on polarity triggering and on negative incorporation. The apparent paradox signalled by the mutual consistency of (15a,b) is resolved by taking the negation in (15b), as distinguished from that in (15c), as an instance of metalinguistic use:[3]

(15) a. Max has three children —indeed, he has four.
b. Max doesn't have three children—(*but) he has four.
c. Max doesn't have three children, (but) he has two.

If Max has four children he does, a fortiori, have three, but if I know he has four I can reject the previous claim that he has three as (not false but) insufficiently informative.

Further real-life negations of the upper bound of scalars are listed in (16):

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[3]Constraints on the distribution of *but* as reflected in these examples are discussed in Horn 1989: §6.4.3.

(16)a. Around here, we don't LIKE coffee, we LOVE it.
(Lauren Bacall, TV commercial for High Point decaffeinated coffee)
b. That wasn't a bad year, it was HORRIBLE.
(Reggie Jackson, on his subpar 1983 season with the Angels)
c. I'm not HAPPY he's gone—I'm elated. Never has an assistant coach gotten so much credit...
(Chicago Bears football coach Mike Ditka, on departure of former assistant Buddy Ryan to become head coach for Eagles in 1986)
d. I have two homes and I don't dig my roots into one or the other. I dig them into both. (12-year old girl, on her joint custody, N. Y. Times, 3/25/84)
e. It's not a car, it's a Volkswagen. (VW commercial and advertisement)
f. EN NEW HAVEN NO ME GUSTA...ME *ENCANTA* RADIO MUSICAL
(Ad on rear of Connecticut Transit buses in New Haven)

In each case, there is a sense that the speaker is inducing a contradiction on the first interpretive pass in order to achieve a special effect of irony or surprise. I'll return to this below.

What is said—<u>now</u>

This halcyon picture, with its pristine separation of what is said from what is meant, was never as pure as I have portrayed it. Even for Grice, propositional content is not fully fleshed out until reference, tense, and other deictic elements are fixed.[4] But with the development of Relevance Theory (Sperber & Wilson 1986), expanding on earlier observations of Atlas (1979), it came to be recognized that the same pragmatic reasoning used to compute implicated meaning must also be invoked to fill out underspecified propositions where the semantic meaning contributed by the linguistic expression itself is insufficient to yield a proper accounting of truth-conditional content.[5] Thus Carston (1985a: 6), citing the natural interpretation of sentences like those in (17),

(17)a. The park is some distance from where I live.
b. It'll take us some time to get there.

argues that what is said must be computed via the Principle of Relevance. It is not sufficient to take the appropriate understanding of the distance or time communicated by the speaker to be derived as an implicatum to be read off the underspecified content directly contributed by linguistic meaning alone, resulting

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[4]Carston (1985a,b, 1988) sees Grice as including the resolution of ambiguity and vagueness as additional components in the determination of what is said, but it's debatable whether Grice would have endorsed this position. (See Atlas 1990 for discussion.)

[5]Similar views were earlier put forward by Lewis (1979) in his elaboration of the notion of pragmatic accommodation.

in an existential proposition that would seem to have to be trivially true. Instead, the pragmatically recoverable strengthened communication comprises what is said, the EXPLICATURE or truth-conditional content. More generally, 'Just because something is pragmatically derived it is not necessarily an implicature' (op. cit.: 4), and indeed, cases like those in (17) represent the rule rather than the exception: 'There is massive pragmatic penetration of explicit content' (op.cit.: 6). Nor does the acceptance of widespread pragmatic intrusion into propositional content result in an erosion of the boundary between semantics and pragmatics:[6]

> Linguistic semantics is autonomous with respect to pragmatics; it provides the input to pragmatic processes and the two together make propositional forms which are the input to a truth-conditional semantics. (Carston 1988: 176)

Thus, both one-sided and two-sided understandings of the scalar predications of (1a-e) are directly represented at the level of logical content. That no privileged status accrues to the 'at least n' understanding of cardinal predications in particular is illustrated by Carston through examples those below.

(18)a. Mrs. Smith does have three children.
b. If Mrs. Smith has no more than three children we'll all fit into the car.
c. If Mrs. Smith has (at least) three children, she qualifies for this program.
(19) If there are three books by Chomsky, I'll buy them all.
(20)a. She can have 2000 calories a day without putting on weight.
b. The council houses are big enough for families with three kids.

The cardinal in (18) will be interpreted as either 'at most three' or 'at least three', depending on whether the utterance comes as a response to (18b) or (18c) respectively. (19), on the other hand, receives an 'exactly three' understanding. And the contexts in (20), based on what we know about the world, are naturally read as forcing 'at most n' understandings.

One apparent dividend promised by the explicit content view of the upper-bounding of scalar predications is that the 'paradoxical' negations of (14) and (16) need no longer present a problem or call for any sort of duality of negation. Rather, such examples

> can and naturally are interpreted as straightforward cases of descriptive negation. The conclusion that there is a lot more truth-conditional ambiguity than is contributed by the language in question is unavoidable. (Kempson 1988: 88)

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[6] A collection of apparent counterexamples to the semantic autonomy thesis was earlier exhibited by Gazdar (1979: 164-68), despite his celebrated advocacy of the now abandoned formula 'Pragmatics = meaning - truth conditions'. (Cf. Kempson 1986 for related discussion.)

While the scalar predications of (1) are now all taken to be ambiguous, the ambiguity is no longer, as in the bad old days, located at the lexical level but has been relocated to the propositional level: what is SAID in an utterance is systematically underdetermined by what is UTTERED.

While endorsing Kempson's pragmatic enrichment analysis of scalar predications, Carston acknowledges that the paradoxical negations of (14) have a strong metalinguistic or echoic flavor that renders them unreducible to ordinary descriptive readings. In particular, she cites the negations of (21), in which the explicit content required by the context takes the scalar predication in the first clause to be strictly lower-bounded (with or without the overt presence of 'at least'), but the marked, metalinguistic reading of negation is still possible and, given the continuation, in fact necessary.

(21)a. You don't have to be (at least) SIXTEEN to drive a car;
you have to be (at least) EIGHTEEN.
b. You don't need (at least) TWO A's to get into Oxford;
you need (at least) THREE.

Given that a straightforward descriptive analysis is contraindicated for the negations in (21), she concludes that 'What we have in these cases is plain ordinary truth-functional negation operating over an echoic use of language' (Carston 1985a: 17).[7] But any such attempt (and see van der Sandt 1991 for a related one) to propositionalize not only upper-bounding implicata but the stylistic, connotative, and mechanical aspects of utterances that fall within the scope of marked negation, as in (6)-(12), would seem to be self-defeating, representing a kind of category mistake: an 'echoic use' is not the sort of beast to which a truth-functional operator applies.

Cardinal *Sinn* ?

Be that as it may, Carston's broadside is striking for its concentration on those scalar predications involving cardinals. Cardinals certainly seem to be a promising place to begin any brief for an explicit content approach to scalar predication. Indeed, as I shall argue briefly and somewhat programmatically here, while a strong case can be made for an enrichment analysis of the meaning

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[7]The notion of echoic negation itself is in need of clarification, since some of our clearly non-propositional examples (e.g. (7) and (12)) require a purely utterance-based notion of echo, while others, as in (i), demand a certain degree of propositionalizing, at least insofar as deixis and tense are concerned.

(i) A: So, I heard you were Robbie's brother.
B_1: I'm not HIS brother, HE's MY brother! (=(9c))
B_2: #You weren't HIS brother, HE was YOUR brother!

contribution of the cardinals, it does not extend in any linear fashion to other scalar values.

First, as Sadock (1984: 142-43) has observed, a minimalist (Grice-Hornian) theory of the cardinals will encounter insuperable difficulty when applied to the truth conditions of such mathematical statements as *2 + 2 = 3* or *The square root of 9 is 2*, each of which would have a true reading on the 'at least' understanding of the cardinals involved *(2 plus 2 is not only 3—it's 4!)*. It is plausible, as Atlas (1990) has suggested, that mathematical values are simply lexically distinct from the corresponding numeral words of natural language, which themselves are unspecified as among their 'exactly n', 'at least n', and 'at most n' values.

Another special property associated with the cardinals but not the 'inexact' quantificational values is the context-induced reversibility of the scales induced, as illustrated in Carston's examples in (18) and (20) but also acknowledged in some from Horn 1972, reproduced here for their historic value:

(22)a. Arnie is capable of breaking 70 on this course, if not {65/*75}.
b. U.S. troop strength in Vietnam was down to 66,300, thus exceeding Mr. Nixon's pledge of 69,000.
c. That bowler is capable of a round of at least 100. [and maybe even 110]
d. That golfer is capable of a round of at least 100. [and maybe even 90]

Context-induced scale reversal is also discussed by Hirschberg (1985: §5.1.4) and Koenig (1991); the key point, however, is that these effects do not extend to the inexact scalar values: 'it does not seem possible to use *some*, for example, in such a way as to implicate "at most some"' (Sadock 1984: 143).

A related factor affecting the interpretation of cardinals but not extending to other scalars is the role of approximation. *I have $200* is far more likely to be read on its non-upper-bounded, minimal reading than is its unrounded counterpart *I have $201.37*, where Quantity interacts crucially with the Maxim of Relation: (Horn 1972: 45; cf. also Sadock 1977, Wachtel 1980 on the pragmatics of approximation).

Even when a traditional scalar line on the cardinals does seem tenable, it largely disappears under incorporation (Horn 1972: 37-8; cf. Hirschberg 1985: §5.1.4, Atlas 1990). An n-sided figure is one that is semantically constrained to have exactly (not at least) n sides. Thus, a square may count as a figure with three sides but it does not thereby qualify as a three-sided figure, much less as (at least) a triangle. A triple (three-base hit) is not (at least) a double (two-base hit), although the list of players with two base hits in a game may include those with three. Nor do we reckon a piece Schubert composed for eight wind instruments among his quartets.

Atlas (1990: 7-9) argues persuasively that the 'exactly n' interpretation of incorporated cardinals is to be linked to the collective or group readings which themselves systematically exclude minimalist treatment. This extends to the

reading of Carston's (19) above, as Atlas points out, citing the contrast between that sentence and its distributive (and scalar-implicating) counterpart:

(23)a. If there are three books by Chomsky in the shop, I'll buy them all. [= (19)]
b. If there are three books by Chomsky in the shop, I'll buy each of them.

Koenig independently notes the 'exactly n' interpretation of sentences like *Three boys carried a sofa up the stairs (*in fact four)* and comes to the same conclusion: 'only distributed readings of count phrases give rise to scalar implicatures' (Koenig 1991: 4).[8]

But once again this correlation, valid as is it for the cardinals, does not readily generalize to the other scalars. Nor does the correlation of focus intonation with non-monotone cardinal readings observed in work by Fretheim (1991) and Rubinoff (1987). Fretheim notes that in response to A's query in (24), the B_1 response is compatible with an 'at least' reading, as the continuation indicates, but the B_2 response must be taken as SAYING, and not just IMPLICATING, that B has exactly three children.

(24) A: How many children do you have?
B_1: I have three children. (...In fact I have four.)
B_2: Three. (...#In fact four.)

Along the same lines, Campbell (1981: 97-99) notes that the upper-bounding implicatum derived in the context of (25) is CRYPTIC or automatic, requiring 'no real conscious effort' on A's part (as to whether B meant 'exactly two' or 'at least two'), while the context in (25') suggests that the addressee applies a PHENIC or conscious inferential mechanism to determine whether an implicature is present.

(25)A: How many children do you have?
B: Two.

(25')A: Do you have two children?
B_1: No, I have three.
B_2: Yes, in fact I have three.

While I have suggested (Horn 1989: 251-52) that Campbell's cryptic/phenic distinction might be subsumed within the descriptive scope of Morgan's notion of SHORT-CIRCUITED CONVERSATIONAL IMPLICATURE (Morgan 1978), an alternative account would take B's response in (i) to build upper-bounding into what is said as part of the EXplicature.

Once again, however, the facts change when we shift to other scalars:

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[8]The most detailed formal treatment of the enrichment of content by uniqueness is due to Kadmon (1987, 1990), who provides an account of how upper-bounding can be accommodated into the discourse representation structure associated with a given utterance if the context—and in particular the presence of a definite anaphoric pronoun—requires.

(26)A: Do you have two children?
B_1: No, three.
B_2: ?Yes, (in fact) three.

(26')A: Are many of your friends linguists?
B_1: ?No, all of them.
B_2: Yes, (in fact) all of them.

Further, notice that a bare *'No'* answer, sans rectification, is compatible with a non-monotone ('exactly n') reading in (26) given an appropriate context, but never in (26'), where an unadorned negative response can only be understood as conveying 'less than many'.

Similarly, if (1e) were really propositionally ambiguous, there is no obvious reason why a *'No'* response to the question *'Is it warm?'* should not be interpretable as a denial of the enriched, two-sided content and thus as asserting that it's either chilly or hot, nor any non-ad hoc account of why we cannot (at least as adults) use the comparative in *'It's getting warmer'* to denote 'less hot' instead of 'less cold'. Such paradigms suggest that scalar (non-cardinal) adjectives are indeed lower-bounded by their literal content and upper-bounded, if at all, by implicature.

In sum, while we can accept Atlas's argument (1990: 15) that 'only in the context of an NP does a numeral modifier have a meaning', no analogous conclusion follows for the full range of scalar values. The signs point to a mixed theory in which sentences with cardinals may well submit naturally to a post-Gricean pragmatic enrichment analysis of what is said, while other scalar predications continue to submit happily to a neo-Gricean minimalist implicature-based treatment.

The said and the meant

The distinction between the said and the meant, and thus between the said and the implicated (the unsaid-but-meant), has a long and distinguished history, one which dates back at least to the fourth century, when rhetoricians characterized litotes, the figure of pragmatic understatement, as a figure in which we say less but mean more (cf. Horn 1991 for discussion):

> ...figura est litotes, quae fit, quotiescumque minus dicimus et plus significamus, per contrarium intelligentes (Servius, cited in Hoffmann 1987: 29)
> ...minus...dicit quam significat (Donatus, cited in Hoffmann 1987: 28)

Somewhat more recently, as we have seen, the Londoners and their allies have redrawn the map on which the territories of the said and the implicated are plotted. The determination of what is said is now recognized as a far more complex and crucially pragmatic matter than on the standard Gricean cartography. In a recent paper, Récanati takes another look at scalar predication and seeks to open a new front against the embattled traditionalists on behalf of the trans-Channel consortium. I cite the relevant passage in full:

> Everybody would agree that the saying/implicating distinction is part of the ordinary, everyday picture of linguistic communication. We commonly talk of what is 'said' as opposed to what is 'implicated' by means of a certain utterance, and it is that distinction which Grice undertook to elaborate...[But] when the domain of Grice's theory of implicatures was extended far beyond our intuitive reach, this was hardly noticed, let alone considered to raise a problem. Not many people have observed that Grice's theory departs from our intuitions when it is applied to examples such as 'John has three children', which Griceans take to express the proposition that John has at least three children and to implicate that he has no more than three children. However, there is an important difference between this example and *e.g.* 'I've had no breakfast today', which implicates that the speaker is hungry and wishes to be fed. In the latter example, the implicature is intuitively felt to be external to what is said; it corresponds to something that we would ordinarily take to be 'implied'. In the former case, we are not pre-theoretically able to distinguish between the alleged two components of the meaning of the utterance—the proposition expressed (that John has at least three children) and the implicature (that he has at most three children). We are conscious only of their combination, *i.e.* of the proposition that John has exactly three children. In this case..., the theoretical distinction between the proposition expressed and the implicature does not correspond to the intuitive distinction between what is said and what is implied. (Récanati 1989: 326)

But just how compelling is this argument from intuition? As an avatar of the anti-Grice, Récanati—like Kempson, Carston, Atlas, and Koenig—judiciously concentrates his fire on our weakest flank, the cardinals. An inspection of the literature on the scalars, in particular the weak positive (upward monotone) determiner *some,* indicates that Grice must be seen as a Paulie-come-lately to an unusually well-established consensus. The distinction between what an expression or its utterer SAYS and what an expression or its utterer MEANS is standardly evoked by nineteenth-century philosophers seeking to preserve the classical analysis of *some* against the lexical-ambiguist line urged by Sir William Hamilton of Edinburgh and his successors (cf. Horn 1990a). In these passages, the emphasis is mine but the proto-Gricean terminology is in the original.

> In common conversation the affirmation of a part is meant to IMPLY the denial of the remainder. Thus, by 'some of the apples are ripe', it is always [sic!] INTENDED TO SIGNIFY that some are not ripe. (De Morgan 1847: 4)
>
> *Some,* in logic, means *one or more, it may be all.* He who says that *some are,* is not to held to mean the rest are not. 'Some men breathe'...would be held false in common language [which] usually adopts the complex particular proposition and IMPLIES THAT SOME ARE NOT IN SAYING THAT SOME ARE. (De Morgan 1847: 56)

> No shadow of justification is shown...for adopting into logic a mere sous-entendu of common conversation in its most unprecise form. If I say to any one, 'I saw some of your children today', he might be justified in inferring that I did not see them all, NOT BECAUSE THE WORDS MEAN IT, but because, if I had seen them all, it is most likely that I SHOULD HAVE SAID SO: even though this cannot be presumed unless it is presupposed that I must have known whether the children I saw were all or not. (Mill 1867: 501)

> Whenever we think of the class as a whole, we should employ the term All; and therefore when we employ the term Some, IT IS IMPLIED that we are not thinking of the whole, but of a part as distinguished from the whole—that is, of a part only. (Monck 1881: 156)

Sapir's particular propositions are also unilateral in content, picking up a bilateral force only as context permits:

> 'Not everybody came' DOES NOT MEAN 'some came', WHICH IS IMPLIED, but 'some did not come'. Logically, the negated totalizer [not every] should include the totalized negative, i.e. opposite or contrary [none], as a possibility, but ORDINARILY this interpretation is excluded. (Sapir 1930: 21)

A more detailed defense of this position is offered by an unfortunately obscure philosopher writing in an equally obscure Jesuit journal:

> WHAT CAN BE UNDERSTOOD WITHOUT BEING SAID is usually, in the interest of economy, NOT SAID...A person making a statement in the form, 'Some S is P', generally WISHES TO SUGGEST that some S also is not P. For, in the majority of cases, if he knew that all S is P, he would say so...If a person says, 'Some grocers are honest', or 'Some books are interesting', meaning to suggest that some grocers are not honest or that some textbooks are not interesting, he is really giving voice to a conjunctive proposition in an elliptical way.
>
> Though this is the usual manner of speech, there are circumstances, nevertheless, in which the particular proposition should be understood to mean just what it says and not something else over and above what it says. One such circumstance is that in which the speaker does not know whether the subcontrary proposition is also true; another is that in which the truth of the subcontrary is not of any moment. (Doyle 1951: 382)

So, pace Récanati, the analysis of the prototypic weak scalars as asserting a lower bound and suggesting or implying—i.e. implicating—an upper bound as a contextually dependent aspect of meaning is among the more robust intuitions in the literature. Of course, this does not vitiate the appeal of an explicature analysis for a particular construction; we have observed that precisely such an approach seems warranted for the cardinals. We turn now to *only* sentences, where I shall argue that the adoption of an enrichment analysis allows us to arrive at a semantically economical account of the linguistic contribution made by *only*.

Only and {im/ex}plicature

Through the millenia there have been two primary approaches to the semantics of *only*. The primary treatment is contained in the thirteenth century treatise on exponibles by Peter of Spain, on which an 'exclusive' expression with the syncategorematic term *solus* or *tantum* ('alone', 'only') is a conjunction that can be expounded (unpacked) into 'an affirmative copulative proposition whose first part is that to which the exclusive sign was prefixed, and whose second part is a negative proposition denying the predicate of all others apart from the subject' (Mullally 1945: 106-7). Thus (27a) entails the conjunction of (26b) and (26c).

(27)a. Only man is rational.
b. Man is rational.
c. Nothing other than man is rational.

More recent advocates of a Petrine conjunction analysis for sentences with *only* or an 'exceptive' like *nothing but...* include Kuroda (1966), Lakoff (1970), Taglicht (1984), Keenan & Stavi (1986), Atlas (1991), von Fintel (to appear), Moser (1992), Burton-Roberts (1992), and Krifka (1992). But does (27a) really SAY (27b) as well as (27c)? And is it the *only* that says it? Here is Peter's contemporary, William of Sherwood:

> It is asked why 'alone' *[solus]* is called an exclusive rather than an inclusive; for when someone says 'Socrates alone is running', Socrates is included under running but the others are excluded. It must be said that it is because the inclusion occurs not as a result of the force of the word but as a result of the statement as it is before the 'alone' is inserted into it. The exclusion, on the other hand,...does occur as a result of the force of the word ['alone'].
>
> (*Treatise on Syncategorematic Words* XI.6, in Kretzmann 1968: 71-2)

This suggests an asymmetric approach on which the positive proposition, e.g. (27b), is not said, or at least not said directly.[9] Along these lines, my own somewhat dusty analysis can be demothballed to reveal a positive presupposition and a negative assertion:

(28) Horn (1969): only (x=a, Fx)
Presupposes: Fa
Asserts: $\sim\exists y(y\neq a \ \& \ Fy)$

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[9] I read Thomas Aquinas (*Summa Theologica* Ia, q. 31, arts. 3 and 4, in Pegis 1945: 311-14) as endorsing a similarly asymmetric position on *only*, although it's possible that with Peter of Spain, who later became Pope John XXI, among the conjunctionalist hosts, I just want to recruit a saint to my side of the ledger for moral support.

Thus *Only Muriel voted for Hubert* (and doesn't that take us back?) presupposes that she did and asserts (and entails) that nobody else did. Crucially, (29a) is distinguished from the true conjunction (29b) which really does simply entail both its positive/(29c) and negative/(29d) components.

(29)a. Only Muriel voted for Hubert.
b. Muriel and only Muriel voted for Hubert.
c. Muriel voted for Hubert.
d. Nobody distinct from Muriel voted for Hubert.

Indeed, one unresolved problem for any conjunctionalist account of *only* is how to explain why (29b) is distinct from (29a) and not simply redundant.

My evidence for the essentially negative character of sentences like (29a) was provided by the possible and impossible continuations in (30). (To the original examples from Horn 1969, 1970 in (30a-e), reproduced here for their nostalgic value, I add the new ones in (f-h) with the expectation that the current paper will seem equally dated in another 23 years.)

(30)a. —Did only Muriel vote for Hubert?
—No, {Lyndon did too/#she didn't}.
b. —Only Muriel voted for Hubert.
—No, that's not true: {Lyndon did too/#she didn't/#nobody did}.
c. Only John smoked the pot, { {if even he did/and maybe even he didn't.} / #if nobody else did. / #and/but maybe someone else did. }
d. Nobody but Nixon is worthy of contempt, and possibly even he isn't.
e. Everybody but Nixon is worthy of salvation, and possibly even he is too.
f. Only Hillary would ever trust Bill.
g. Only if he runs against George would I vote for Bill.
h. 60% of the men {but/?and} only 40% of the women voted for George.

The argument here (Horn 1969: 105; cf. also Ducrot 1973 on the scale-reversing properties of *seulement)* is that entailment (as reflected in constraints on cancellation or suspension), polarity effects, and monotonicity diagnostics (cf. Barwise & Cooper 1981) are determined by the assertion alone—what is said—and not by what is presupposed or implicated.

A similar analysis is proposed in Horn 1979, except that the positive or existential component (e.g. (29c)) is now taken to follow from the *only* sentence by CONVENTIONAL IMPLICATURE à la Grice 1975 and Karttunen & Peters 1979, rather than representing a truth-value-gap inducing logical presupposition. Rooth (1985) adopts the same line, although he disregards the implicated component in the implementation of his semantics. Data like those in (31), applying Karttunen-Peters-type diagnostics to *only* sentences,

(31)a. If only Hillary trusts Bill, all is well.
b. I just discovered that only Hillary trusts Bill.
c. It's too bad that only Hillary trusts Bill.
d. I know Hillary trusts Bill, but does ONLY Hillary trust Bill?
e. #I know nobody besides Hillary trusts Bill, but does only Hillary trust Bill?

suggest that *Only Hillary trusts Bill* does indeed (at most) conventionally implicate, and not say, that Hillary trusts Bill. The fact that the positive proposition falls outside the scope of the assertion in each case reinforces the view that we are dealing with a non-truth-conditional aspect of conventional meaning.[10] But are we? Or is a more unconventional analysis called for?

A rigidly minimalist stance on *only* is advocated by Geach (1962: 187), for whom there is NO relation between the *only* expression and its positive counterpart. Thus 'F (some α)' is not deducible from 'F (only α)' either as an entailment or as a non-truth-conditional aspect of conventional force. Geach's argument for this analysis from logical convenience—'It is formally much more convenient to treat the exclusive proposition as having precisely the exclusive force of its supposed second [negative] component'—appears to fly in the face of intuition, entailing as it does that *Only the President can rectify the Rodney King verdict* is true on the grounds that NOBODY can rectify the Rodney King verdict. But what if we can derive the positive proposition as a CONVERSATIONAL implicature?

All things equal, we should prefer a Geach-type account. An appeal to conventional implicature is an admission of analytic defeat, suggesting that the lexical semantics could be otherwise: conventional implicata may be implicata, but they are also conventional. In fact, though, we've seen that the positive component of a sentence with an exclusive or exceptive can be cancelled in context (recall (30c,d,e))[11], and as (32) shows, the implicature in question appears to be non-detachable as well, two arguments for its non-conventional status.

(32) Only Democrats support Brown.
Nobody {but/except/other than} Democrats support Brown.

To make the case, however, we need a demonstration of calculability: how can the positive component of *only* sentences be derived as a conversational implicatum? Here we follow an argument of McCawley (1981: 226), as well as

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[10]If the semantics of *only if* are compositional, they reinforce the conclusion that the positive proposition is not entailed, or *p only if q* would be equivalent to *p if and only if q*, which it clearly is not: *I'll go (#if and) only if you do and maybe not even then.* But the distinction between *only if* and *if and only if* is parallel to that between *only linguists* and *linguists and only linguists.*

[11]Or the classic exceptive in (i),

(i) All the world is queer save me and thee, and sometimes I think thee is a little queer.

attributed by Bartlett et al. to 'an unidentified Quaker speaking to his wife'. As in the other examples of felicitous cancellation, the presence of an epistemic qualifier is essential.

independent suggestions along the same lines by de Mey (1991) and Hoeksema (1991): it is pointless to weaken a statement predicating something universally if you know that the predication holds for the excepted elements as well. If you know—or even strongly suspect—that NOBODY supports Brown, (32) is a pretty silly way of conveying this. Note in addition that (32) does not implicate that Democrats support Brown, but only that some do.

The key here lies in the converse relation between *only* and *all*, recognized by the medievals ('Tantum animal est homo ergo omnis homo est animal': Peter/Mullally 1945: 106-7) and more recently exploited by Löbner (1987) and de Mey (1991). To say that only Democrats support Brown is to say that all Brown supporters are Democrats. But, as has been recognized for a couple of millenia (cf. Horn 1989: §1.1.3 for discussion), there is an existential inference, generally assumed to hold non-logically, that is typically associated with universals. Thus we can pragmatically infer that there are indeed Brown supporters; otherwise the *all*-statement would be informationally vacuous and hence pointless to assert. But now we obtain that conclusion that there are indeed Democrats who support Brown, which is the strongest positive proposition licensed by (32). Another way to put the same point is that it's just as true, but just as uncooperative, to assert (32) if you know that nobody supports Brown as it is to assert that all Jack's children are bald on the grounds that Jack is childless.

Thus I claim that whenever something is predicated of an entire contrast set with a specified excluded or excepted subset, the complementary property is conversationally implicated to hold of the exception, modulo assumptions of relevance and knowledge. This position is reminiscent (at least to me) of one defended elsewhere (in Horn 1981) advocating that the cleft in (33a), while conventionally implicating the backgrounded existential proposition in (33b), does not conventionally implicate (33c) or (33d), contra Halvorsen 1978, and does not entail or assert (33c), contra Atlas & Levinson 1981 (and now Aissen 1992: 50-51).

(33)a. It was a pizza that Mary ate.
b. Mary ate something.
c. Mary ate nothing (within the context set) other than a pizza.
d. Mary ate at most one thing (within the context set).

Rather, as the non-detachability paradigm in (34) indicates,

(34)a. What Mary ate was a pizza. [psuedo-cleft]
b. The thing that Mary ate was a pizza. [*th*-cleft]
c. Mary ate a PIZZA. [focus intonation]
d. A PIZZA, Mary ate. [focus- or Y-movement]

the exhaustiveness premise associated with clefts and other focus constructions is derivable as a generalized conversational implicature. That is,

> The utterance in context C of any sentence which entails Fα and conventionally implicates ∃x(Fx) will induce a generalized conversational implicature to the effect that ~∃x(x≠α & Fx), where the variable x ranges over entities determined by C. (Horn 1981: 134)

Without going through the details of that argument (cf. Vallduví 1990 for a recent concurring opinion), I shall merely note here that on the account proposed here, (35b) does not follow from (35a) by virtue of semantics, just as (35d) does not follow from (35c).

(35)a. I love only you.
b. I love you.
c. I love YOU.
d. I love nobody distinct from you.

That is, *I love only you* is not a declaration of love nor *I love you* a declaration of fidelity, but the recipient in each case is pragmatically licensed to hope for the best.

Unfortunately for the symmetry of this picture and for the simplicity of the story proposed for *only* here, there are contexts in which an *only* sentence does seem to entail both of its components, as on the Petrine conjunction analysis:

(36)a. Mary will be upset if only Bill makes it to her dinner party.
b. I bet you $10 that only Kim passes the test.
c. Guess what: only Kim passed the test!

The contrast with the well-behaved implicata of *even* sentences is especially striking; in the parallel examples of (37) the scalar and existential implicata remain properly outside the scope of what is said.

(37)a. Mary will be upset if even Bill makes it to her dinner party.
b. I bet you $10 that even Kim passes the test.
c. Guess what: even Kim passed the test!

Thus if Kim passes the test, the speaker of (37b) wins the bet, if not not, regardless of whether others passed or whether Kim's success was particularly surprising.[12] What of (36b), though? If everyone flunked, no amicable

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[12]On the standard Karttunen-Peters type analysis of *even* (Karttunen & Peters 1979: 23-33; cf. also Fraser 1971, Horn 1971), (i) conventionally implicates both (ii) and (iii).

(i) Even Kim passed the test.
(ii) There are other x under consideration besides Kim such that x passed the test.
(iii) For all x under consideration besides Kim, the likelihood that x passed the test is greater than the likelihood that Kim passed the test.

settlement of the wager is at hand. Similarly, in (36a), Mary may just be apprehensive about an evening alone with Bill; if no one shows up at all she will happily pop a meal in her microwave and a tape in her VCR.

The problem is that on the natural interpretation of the sentences of (36), contrary to what we found earlier, *only* α... does indeed get interpreted as SAYING α *and only* α...[13] What we need here is precisely a Sperber-Wilson-Kempson-Carston type analysis in which the positive component, while not constituting part of the linguistic meaning contributed by *only*, DOES enter into the determination of what is said, the enriched propositional content. I submit that an asymmetric theory of the conventional meaning of *only* in the spirit of William of Sherwood and of Geach, combined with a Gricean approach to the positive or existential component and with a London-style account of the apparently recalcitrant cases, provides the most natural and least stipulative treatment of the full range of data.[14]

I would maintain, however, that only the latter implicature need be stipulated as conventional. First, the non-uniqueness inference in (ii) can be straightforwardly derived from the use of an expression that induces the scalar implicature in (iii) while making no other contribution to the content of the sentence in which it occurs. But in addition, Karttunen & Peters's 'existential implicature' can be cancelled in the appropriate context, such as the one observed by Bruce Fraser (p.c., 1971):

(iv) Come on, Chris, eat up—even little Billy finished his cereal.

(iv) can be uttered by a parent to an older child without implicating that anyone other than little Billy has eaten his cereal, provided that Billy is the less likely of the set of two to have done so. If this reanalysis is tenable, one more putative conventional implicature bites the dust.

[13]Sometimes this intended strengthening is not directly apparent to the beholder. I had to read a recent headline 'Lenin Belongs Only in a Museum—or Does He?' more than once to realize that the question had to do with whether Lenin belongs EVEN in a museum.

[14]One crucial aspect of the context in determining the content of *only* expressions is the semantic type of the focus of *only*. De Mey (1991: 102-4) acknowledges that the pure conversational line he tentatively endorses for the existential proposition is most convincing for CN subjects like (i), less so for proper names as in (ii), and least of all for cardinal foci as in (iii); an epistemological account of the difference seems plausible, but I cannot pursue this here.

(i) Only students (if anybody at all) read books.

(ii) Only John (if anybody at all) slept.

(iii) Only three pilots (if anybody at all) slept.

For William of Sherwood, too, the truth-conditions of an *only* sentence will depend on the context, but he is particularly sensitive to the effect of distributive vs. group readings of *only n* subjects, pointing out (Kretzmann 1968: 95) that while generally, 'If one says "only three", one cannot infer "therefore not two", but instead "therefore not four or five"', as in (iv),

(iv) Only three are running.

(v) Only three are hauling the boat.

The Cloud of Unsaying

In the cases examined so far, what is said is contrasted with what is meant without being said: some things must be said, some things are better left unsaid. But there are also those things that a speaker must unsay. It is to this reversative category of the unsaid that we now turn.

We observed rather briefly above the double processing effect associated with some examples of marked negation[15], an effect emerging even more clearly in the opening paragraph of a late 1984 New York Times op-ed column by television news commentator John Chancellor, in which what is said must first be constructed and then, when the final sentence is reached, deconstructed:

> When Ronald Reagan carried 49 states and won 525 electoral votes, it was not an historic victory. Walter F. Mondale's poor showing wasn't an historic defeat. Mr. Mondale's choice of Geraldine A. Ferraro as his running mate wasn't an historic decision, either. None of these was an historic event. Each was a historic event.

Only the rectification forces this reanalysis, in which what is said must retroactively be unsaid. A parallel instance occurs in a passage from *Othello* (III.iv) in which the words Bianca puts into Cassio's mouth

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both upper and lower bound are excluded in (v), which can only be read as saying that exactly three are engaged in boat-hauling. The link between propositional enrichment and group readings with *only* recalls the parallel correlation for basic cardinal predications observed earlier.

[15] I have argued elsewhere (Horn 1989: 484-90, Horn 1990: 496ff.) that the set of metalinguistic negations inducing double processing is not truth-conditionally homogeneous, contra Burton-Roberts 1990 (and vitiating the criticism in Wiche 1991). In just those instances in which the the focus of negation involves a truth condition for the corresponding affirmative, including in particular the primal datum,

(i) The king of France is not bald. [as uttered post 1870]

the very act of issuing a METALINGUISTIC negation suffices to render the sentence true as a DESCRIPTIVE negation. Thus, even though such a denial is most naturally uttered as an echoic objection to an earlier positive assertion, it differs from our earlier examples in that no truth-conditional contradiction arises in the processing of the negative utterance. When the objection focuses on a conventional implicatum that is NOT a truth condition of the affirmative, as in the examples in Note 2 above, on the other hand, the use of metalinguistic negation fails to guarantee the truth of the corresponding descriptive negation. The disunity of the class of metalinguistic negations is demonstrated by the distribution of *because* clauses, where infelicity results only when an utterance is objected to on purely non-truth-conditional grounds:

(ii) The king of France isn't bald, (because) there is no king of France.

(iii) I'm not his brother, (#because) he's my brother!

(iv) I didn't trap two monGEESE, (#because) I trapped two monGOOSes.

(v) Grandpa isn't feeling lousy, Johnny, (#because) he's just indisposed.

Cf. Burton-Roberts 1989: 237 and Horn 1990b: 499-500 for two sides to this story.

Cassio: Leave me for this time.
Bianca: Leave you? Wherefore?
Cassio: I do attend here on the general
And think it no addition, nor my wish
To have him see me womaned.
Bianca: Why, I pray you?
Cassio: Not that I love you not.
Bianca: But that you do not love me!

serve to convert the descriptive negation of his protest into a quibble over *do*-support: it's not that I love you not, it's that I don't love you. And when Joan Rivers, in an April 22, 1992 address to Yale undergraduates on 'Life in the Real World', reminds Yale students,

> Remember, kids. It's not who you know, it's WHOM you know.

double processing strikes again.

Parallel to the Chancellor, Shakespeare, and Rivers citations is the scalar implicature-cancelling negation in Hungarian, where Varga (1980: 90) observes that contrarily to the ordinary lower-bound-denying negation of (38a),

(38)a. `Nem `olyan gyorsan gépel mint te. 'He doesn't type as fast as you'
not as fast types as you (=he types more slowly)
b. `Nem ᵛolyan gyorsan gépel mint te, 'He doesn't type as fast as you,
hanem `gyorsabban. but faster'

the marked negative utterance in (38b)

> may have a surprising or humorous effect (because it contradicts our pragmatic expectations mobilized by the first part of the sentence), but is perfectly acceptable...The lower-value ['less than'] interpretation prevails unless the higher-value interpretation is explicitly stated.

Similarly, (39) is processed as 'a pragmatic contradiction...exploited to create a surprising and/or humorous effect'.

(39) `Nem ᵛolyan magas Ø, mint te, hanem `sokkal `magasabb Ø.
not as tall is as you but much taller is
'He isn't as tall as you, he's much taller'

This sense of irony, surprise, or humorous affect accompanying the double processing induced here is worth stressing. Earlier accounts of metalinguistic or marked negation, like Jespersen's (cited above) or mine, as when I comment that 'There is a procedural sense in which the descriptive use is primary: the...metalinguistic understanding is typically only available on a "second pass", when the descriptive reading self-destructs' (Horn 1989: 444), fail to deal

adequately with this affect and hence to assimilate the marked negations of these cases to other modes of ironic unsaying. Yet the effect is not surprising, especially in the light of the echoic theory of irony (Sperber & Wilson 1986).

To illustrate, I'll consider three distinct devices for triggering ironic reprocessing. First, as we see in (40), the formula 'No X, no Y' may be filled in—depending on context and contour—either conjunctively or conditionally:

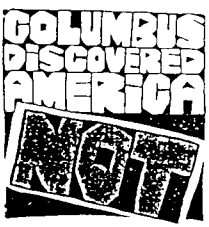
(40) a.	No retreat, no surrender.	No smoking, No drinking.	$(\varphi \,\&\, \psi)$
b.	No pain, no gain.	No tickee, no washee.	$(\varphi \rightarrow \psi)$

Even here, the context is paramount in determining context: 'No vegetables, no dessert' will be taken as a conditional or a conjunction depending on whether it's uttered as a parent's warning or a maitre d's apology. But the sign posted on the Yale Commons cafeteria door reproduced in (41) must first be assigned conditional content; only at the bottom does this content get erased and replaced by that of a loony conjunction.

(41) NO SHIRT, NO SHOES
NO SERVICE

ALSO—NO SKATES

But my retroactive negation of choice is the ubiquitous if notorious ...NOT of Wayne's World fame, as is now appearing on a T-shirt near you, to honor the local namesake on his quincentenary:



What especially drew my attention to retro-NOT is its apparent conflict with the well-established functional tendency for natural language negation to precede its focus, even when typological syntactic considerations militate against it. This NEG-FIRST principle, stressed by Jespersen and exemplified in Horn 1989, is motivated by the tendency to signal negation as early as possible, even at the cost of introducing ambiguity, to forestall potentially significant misinterpretations, especially in directive speech acts: 'Kill him—oops—not!' But it is precisely this cooperation-based motivation for EARLY negation that is exploited by the use of TOO-LATE negation of the garden-pathing, sarcastic genus. Thus the effect is quite parallel to that of the garden-variety garden-path echoic negations we have discussed, a parallel that especially struck me when my young son came out with the sequence in (42) a few months after his younger sister had hit me with the functionally parallel metalinguistic negation in (43):

(42) You're my favorite person. *(pause)* NOT! *(shorter pause)* Just kidding! (David H., 9:6)

(43) I don't like you, Daddy. *(pause)* I love you. (Meryl H., 6:6)

The history of retro-NOT, incidentally, is a bit longer than Wayne and Garth might suggest. In (44) we have a citation from Archie Goodwin in a mid-1950's Nero Wolfe mystery, and in (45) and (46) instances from a pre-war juvenile Western novel[16]—pre-World War I, that is—by the renowned author of *Tom the Telephone Boy, Two Boy Gold Miners,* and *The Boy Pilot of the Lakes:*

(44) I stood with my arms folded, glaring down at Nero Wolfe, who had his 278 pounds planted in a massive armchair...'A FINE WAY TO SERVE YOUR COUNTRY', I told him. 'NOT. In spite of a late start I get you here in time to be shown to your room and unpack and wash up for dinner, and now you tell me to go tell your host you want dinner in your room. Nothing doing. I decline.' (Stout 1955: 54)

(45) 'Larry, you and Bill build the fire and get supper ready. Horace, I'll put you in charge and you must arrange the place for us to sleep. I can see some pine trees yonder. Break off some limbs and spread them on the ground. Then put the blankets over them.'
'YOU'RE A FINE COMMANDER TO BE LIEUTENANT FOR—NOT', declared Horace. 'Gave me the meanest job of all.' Yet he lost no time in obeying. (Webster 1910: 68)

(46) 'HE'S A FINE NEIGHBOR—NOT', declared Larry. 'I should have thought he would be only too glad to help your father and Mr. Snider get back their cattle.' (Webster 1910: 145)

Notice that in each case the retroactive unsaying follows a previous affirmation involving the predicate *fine,* which may tip the reader off to the sarcastic intent in the same manner that the fall-rise contour does with metalinguistic negation. The recipient is warned to tread lightly on that garden path.[17]

One last example: while negative parentheticals normally follow a main clause negation and contribute a functionally pleonastic negative—*He isn't, I (don't) think, going to be able to make it today*—the negative parentheticals in (47) are very much NON-pleonastic, serving (like their retro-NOT cousins) to unsay what was said and install its contradictory.

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[16]Retro-NOT seems to have a particular appeal to children and adolescents alike. Jack Hoeksema informs me that in Dutch, where ordinary *niet* occurs in pre-verbal position in canonical SOV clauses, retroactive *niet* has been innovated, either spontaneously by his 3-year-old daughter or via the pre-school grapevine. His daughter contributed the data in (i) and (ii), where the explosive negative is preceded by a telltale pause, the classic invitation to stroll down that garden path:

(i) Papa is lief—NIET! (standard Dutch: *Papa is niet lief.*) 'Daddy is sweet. NOT!'

(ii) Nette moet plassen—NIET! (vs. *Nette moet niet plassen.*) 'Annette must pee. NOT!'

[17]When the original content is itself negative, the retroactive negator cannot be NOT, but other alternatives are available:

(i) You don't please me when you squeeze me.
No, not much.

(47) 'Look here, kid', said R.C. [Grey's brother], 'save something for tomorrow.'
In disgust Romer [Grey's son] replied, 'Well, I suppose if a flock of antelope came along here you wouldn't move...YOU AN' DAD ARE GREAT HUNTERS, I DON'T THINK!'
(1918 Zane Grey memoir, Tonto Basin)

HARRY'S A REAL GENIUS, I DON'T THINK. (Cutler 1974: 117)

Once again, the patently insincere superlatives signal the undoing to come.

A final note on the fine art of unsaying. This device has a rich history in rhetoric. We find it mentioned by Steele in the Tatler:

> My Contemporaries the Novelists [i.e., journalists] have, for the better spinning out Paragraphs, and working down to the End of their Columns, A MOST HAPPY ART IN SAYING AND UNSAYING, giving Hints of Intelligence, and Interpretations of indifferent Actions, to the great Disturbance of the Brains of ordinary Readers. (Steele 1710: 469)

Even more striking is Vaughn's unmasking of this black art in his mocking vilification of the morally corrupt Romantics and their 'doctrine of Irony':

> After advancing a paradox, or pushing a fancy to the edge of absurdity, let the author turn round, and abandon his own creation...Thus, if any dullard begins gravely to criticise, he shall have only laughter for his pains, as one too gross for the perception of humour...According to the Ironic theory, such SAYING AND UNSAYING IS NOT CONVENIENT MERELY (as a secret door of escape behind the tapestry), BUT IN THE HIGHEST DEGREE ARTISTIC. For what is Art, but a sublime play? (Vaughan 1856: 346-47)

Of course, as Spurgeon (1882: 284) reminds us, we must be on our guard,

for IT IS SO MUCH EASIER TO SAY THAN TO UNSAY.

NOT!*

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